

ORNAMENTALS

• H O T L I N E •

INSECTS

September 15, 2017

Brian Kunkel
Ornamental IPM Specialist

COOL SEASON MITES: Cooler temperatures arriving in the next few weeks will cause cool season mites to resume their activities. Spruce spider mites and Southern red mites are two of our most common cool season mites in our area.

SPRUCE SPIDER MITES: Recall from previous issues, spruce spider mites feed on fir, arborvitae, spruce, Douglas-fir, and other conifers. They feed on older foliage first and are olive - dark red with reddish-yellow legs. Two reddish eye-spots can be seen along with a pale stripe down the back when they are examined under a scope. Their eggs are orange with ridges along the sides of the sphere and have a "thread" at their top. Their entire life-cycle may take only 12-19 days in optimum conditions. Spruce spider mites nymphs typically feed in the fall from 2301 - 3957 [3094 peak] GDD₅₀ and are often the source of the damage found the following summer as bleaching, yellowing, stippling or bronzing of the needles.

SOUTHERN RED MITES: Southern red mites are another cool season mite, but this species feeds on broad leaf evergreens, such as hollies, camellia and azaleas. The eggs are red and laid on the underside of leaves. Nymphs and adults are a dark reddish brown, and nymph feeding is found from 2401 - 3584 [3034 peak] GDD₅₀. This spider mite does not form webbing, but may cause foliage to have a grayish green appearance (especially on hollies).

Monitor by using a clipboard and a white sheet of paper. The mites will be the size of the period at the end of the sentence.

(Continued)

DISEASES

Nancy Gregory
Plant Diagnostician

PHYTOPHTHORA ROOT ROT, caused by the fungus-like, soil-borne pathogen, is a problem on many tender, woody and herbaceous landscape plants. Azalea, holly, rhododendron, and juniper are the most frequently affected plant groups in poorly drained or over-watered landscapes. If a Phytophthora problem is confirmed, the best option is to remove affected plants, improve drainage, and replant with more resistant species. Good choices include *Ilex glabra* (inkberry holly), *Clethra alnifolia* (summersweet), *Itea sp* (sweetspire), *Physocarpus opulifolius* (Eastern ninebark), and *Leucothoe fontanesiana*. Some suggested by Coop Extn in North Carolina include *Nandina*, Chinese holly (cultivars 'Rotunda', 'Dwarf Burford' and 'Carissa'), liriopie, Indian hawthorn, and *Camellia sasanqua* cultivars (*Camellia japonica* is highly susceptible). Rhododendron hybrids: 'Caroline', 'Martha Isaacson', 'Professor Hugo de Vries' and 'Red Head' are resistant.

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UNIVERSITY OF DELAWARE

COOPERATIVE EXTENSION

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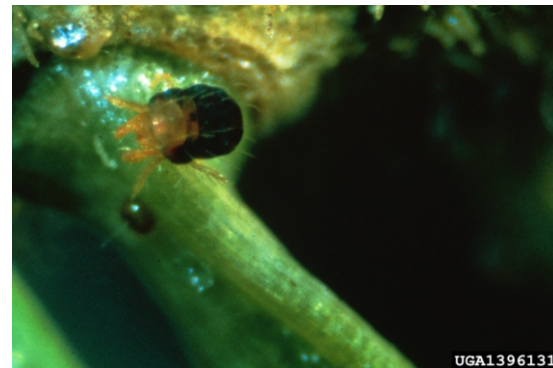
What's Hot!

Leaf scorch, yellowing and drop is evident on many hardwoods such as sycamore, London plane, and cherry. Rake up leaves that fall, trees should leaf out normally in the spring.

Spruce needlecast control includes fungicides in the early spring; we see the fruiting bodies now on second year needles.

Insects (Continued)

Watch for predatory mites and small lady beetles--predators of the spruce spider mite to be conserved. Miticides available for control include hexythiazox (Hexygon, Savy), bifentazate (Floramite), abamectin (Avid), spiromesifin (Forbid), spirotetremat (Kontos) and others. Previous research has shown bifenthrin (Talstar) can cause mite 'resurgences' because natural enemies are killed; thus mite eggs hatch without threat of predators.



Spruce spider mite. Photo credit: USDA-Forest Service Northeastern Area, bugwood

For more information

on pests & practices covered in this newsletter, call your County Extension Office

Helpful numbers to know:



Garden Line (for home gardeners only)	831-8862
New Castle County Extension	831-2506
Kent County Extension	730-4000
Sussex County Extension	856-7303

View more pictures at <http://extension.udel.edu/ornamentals/archive/>

Diseases (Continued)

The azalea cultivars 'Formosa', 'Fred Cochran', 'Fakir' and 'Corrine Murrah' are highly resistant. Other resistant azalea cultivars include *Rhododendron poukhanese*, 'Formosa', 'Fakir', 'Corrine Murrah', 'Merlin', 'Hampton Beauty', 'Higasa', 'Pink Gumpo' and 'Delaware Valley'.

TREE DECLINE AND REPLACEMENT can be difficult, based on the site and particular disease or pests. A list of trees that show few problems in Delaware and Maryland include: American Hornbeam, *Carpinus caroliniana*, sun to shade, large tree; Amur Maple, *Acer ginnala*, full sun to light shade, small tree; Baldcypress, *Taxodium distichum*, full sun, large tree, surface roots; Black Gum, *Nyssa sylvaticia*, full sun or light shade, prefers acid soils, large tree; Carolina silverbell, *Halesia tetraptera*, sun or light shade, small tree, flowering; Cornelian Cherry Dogwood, *Cornus mas*, sun or light shade, small tree; Fringetree, *Chionanthus virginicus*, sun to light shade, small tree, white flowers; Ginkgo, *Ginkgo biloba*, sun, male trees preferred as fruit smells bad; Kousa dogwood, *Cornus kousa*, sun to light shade, more resistant to pest and disease; Pawpaw, *Asimina triloba*, sun to light shade, fruit; Red buckeye, *Aesculus pavia*, full sun, small tree with red flowers; River birch, *Betula nigra*, full sun to light shade, nice in a clump; Swamp white oak, *Quercus bicolor*, full sun, good drought resistance; Sweetbay magnolia, *Magnolia virginiana*, sun to shade, moist soils; Three-flower maple, *Acer triflorum*, sun to shade, moist soil, small tree; Green Giant Arborvitae, *Thuja plicata*, sun to light shade, good property screen.

Editor: Susan Barton
Extension Horticulturist



Phytophthora stem and crown rot on *Strobilanthes*. Photo credit: N. Gregory

GROWING DEGREE DAYS
AS OF September 12, 2017

- Swarthmore College (Delaware County, PA) = 3019 ('16 = NA)
- Fischer Greenhouse (New Castle County) = 3007 ('16 = 3307)
- Research & Educ. Center, Georgetown (Sussex County) = 3314 ('16 = 3391)



Southern red mite. Photo credit: Jim Baker, NC State University, bugwood